

Remarks

Reconsideration of the application is respectfully requested. No new matter has been added to the claims.

5 Claim 2 was objected to. Claim 2 has now been corrected and should be in full conformance.

Claims 1, 2, 4-6 were rejected under Section 102 as being anticipated by Elmore. This rejection is respectfully traversed.

10 To summarize the present invention, it is an effective method for treating chips where the chips are first heated by steam in a steam treatment and subjecting the chips to an increased acidification during the steam treatment, while adding an acidic fluid during the steam treatment to at least five-fold increase an ionic concentration of hydrogen  
15 ions at the end of the steam treatment. The final pH of the chips is reduced by at least 0.5 units. In other words, this acidification takes place without producing large volumes of acidic waste liquids, and the chips per se are made strongly acidic in the steam treatment phase.

20 Claim 1 has been amended to more clearly claim that the acidic fluid is added to the chips during the steam treatment prior to forming the chips to slurry with an alkali impregnation fluid and conveying the slurry to the digester.

25 It is submitted that none of the cited references teaches or suggests these unique steps.

Elmore merely shows a method for producing pulp in which the chips are steamed in a steaming vessel 13. As shown

in Fig. 1, no acidic fluid is added to the steaming vessel 13. Elmore adds the acidic fluid in line 24, which is located downstream of the steaming vessel 13, and during slurrying of the chips in the chute 14.

5           It is submitted that Elmore completely fails to teach or suggest adding any acidic fluid to the steaming vessel 13. Applicant fails to see why a person of ordinary skill in the art would look to Elmore to learn about adding the acidic fluid during the steam treatment to five-fold  
10       increase the ionic concentration of the hydrogen ions when Elmore completely fails to teach these steps. He merely teaches the addition of acid in the slurrying phase of the chips and drenching the chips in an acidic liquid solution. This "mild acid" keeps the feeder 15 free from contaminants  
15       (col. 4, lines 54-55) and there is no teaching of a five-fold increase of ionic concentration of hydrogen ions during the steam treatment. It is submitted that there is a fundamental difference in establishment of a strong acidic steaming phase according to the present invention, compared with Elmore that  
20       instead implements an acidic slurrying phase resulting in the need for a special recovery process of the mixed acidic/alkaline hydrolysate (as shown in Fig. 2 of Elmore).

          It is submitted that Elmore would require extensive modifications that are not taught or suggested to meet the  
25       limitations of the amended claim 1.

          Claims 2, 4-6 are submitted to be allowable because

they depend upon the allowable base claim 1 and because each claim includes limitations that are not taught or suggested in the cited references.

5 Claim 3 was rejected under Section 103 as being obvious over by Elmore in view of Chemical Pulping by Gullichsen. This rejection is respectfully traversed.

10 Claim 3 is submitted to be allowable because it depends upon the allowable base claim 1 and because the claim includes limitations that are not taught or suggested in the cited references.

Claim 7 was rejected under Section 103 as being obvious over by Elmore in view of Snekenes (US Patent No. 6,203,662). This rejection is respectfully traversed.

15 Claim 7 is submitted to be allowable because it depends upon the allowable base claim 1 and because the claim includes limitations that are not taught or suggested in the cited references.

20 Claim 8 was rejected under Section 103 as being obvious over by Elmore. This rejection is respectfully traversed.

Claim 8 is submitted to be allowable because it depends upon the allowable base claim 1 and because the claim includes limitations that are not taught or suggested in the cited references.

The application is now submitted to be in condition  
for allowance, and such action is respectfully requested.

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Respectfully submitted,

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